

REMARKS

This paper is responsive to the Final Office Action dated June 6, 2006. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination of all pending claims is respectfully requested.

Support for the amendments to the claims herein is found throughout the Specification as originally filed. For example, the amendments herein are supported by lines 4-5 on page 3, lines 2-4 on page 4, and lines 27-28 on page 4.

At paragraphs 2-8 of the Office Action, the Examiner rejected claims 1, 3, 5, 6, 8, 10, 11, 13 and 15 for anticipation under 35 U.S.C. 102, citing United States patent number 5,404,544 of Crayford ("Crayford"). Applicant respectfully traverses this rejection.

In the Crayford system, a Media Access Controller (MAC) with an embedded 10BASE-T transceiver uses the LNKST signal to provide power management to the MAC. By using the programmable AWAKE bit, the receive section of the Crayford 10BASE-T transceiver can remain powered, even if the SLEEP input to the MAC is activated. The Crayford transceiver is allowed to detect a link beat pulse or receive packet activity. If either of these receive conditions is encountered, the Crayford internal transceiver will activate the LNKST output from the MAC. If the LNKST output is active, then the computer is connected to an active network, and it is likely that the operating system will allow the Crayford MAC to remain powered. However, if the LNKST becomes inactive then the Crayford system can assume that the link is inactive, and the Crayford MAC can be powered down to save power. If at a later time the link is re-established, the Crayford MAC can be powered back up to take advantage of the

communications channel. In this way, the power consumption of the Ethernet connection can be managed by the Crayford operating software/hardware.

Nowhere in Crayford is there disclosed or suggested a computer implemented method or system for expediting a selected operation in a computer system, including:

associating a plurality of routing operations with an operating system routing task, the plurality of routing operations including the selected operation, wherein the operating system routing task is one of a plurality of operating system tasks executed by an operating system included in the computer system;

executing the operating system routing task at a low priority level prior to performing the selected operation; and

raising the operating system routing task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition comprising a link state advertisement protocol message indicating that the selected operation is to be performed, *wherein the raising the operating system routing task to the high priority level causes the operating system routing task to execute without being interrupted by at least one other operating system task running at the low priority.* (emphasis added)

as in the present independent claim 1. Independent claims 6 and 11 include analogous features. In contrast, Crayford teaches a system for power management, in which link state messages are monitored in order to power up and power down a device. Crayford discloses the use of an "operating system" to "allow the MAC 30 to remain powered", but the teachings of Crayford include no hint or suggestion of even the desirability of associating even one routing operation with an operating system task, or of providing multiple operating system tasks at high and low priority levels, as in the present independent claims 1, 6 and 11.

Some of the difficulty in this regard may result from an apparent misunderstanding of the word "task" in the context of an operating system. As it generally known in the art of computer science, a "task" is a software process consisting of an independently running program or set of instructions executing on a computer system. For example, Applicant respectfully directs the

Examiner's attention to the definition for the word "task", as found in the on-line encyclopedia
www.webopedia.com:

An operating system concept that refers to the combination of a program being executed and bookkeeping information used by the operating system . . . (emphasis added)

In distinct contrast, Crayford describes a power saving mode for a Media Access Controller (MAC). The system software of Crayford controls power operation of the MAC hardware, but nothing in Crayford describes even the desirability of raising the priority of a task associated with a routing operation to prevent interruption of the task by other tasks running at a lower priority, as in the present independent claims 1, 6 and 11. Moreover, Crayford includes no hint or suggestion of any changing of the priority of any operating system task, since the system software of Crayford is not described as including *any tasks*.

For the above reasons, Applicant respectfully urges that Crayford does not disclose or suggest all the features of the present independent claims 1, 6, and 11. Accordingly, Crayford does not anticipate the present independent claims 1, 6 and 11 under 35 U.S.C. 102. As to claims 3, 5, 8, 10, 13 and 15, they each depend from claims 1, 6 and 11, and are respectfully believed to be patentable over Crayford for at least the same reasons.

At paragraphs 9-13 of the Office Action, the Examiner rejected claims 4, 9 and 14 for obviousness under 35 U.S.C. 103, again citing Crayford, and additionally citing lines 26-30 on page 1 of Applicant's disclosure. Applicant respectfully traverses this rejection.

Nowhere in Crayford or in the Background of Applicant's Specification is there disclosed or suggested a computer implemented method or system for expediting a selected operation in a computer system, including:

associating a plurality of routing operations with an operating system routing task, the plurality of routing operations including the selected operation, wherein the operating system routing task is one of a plurality of operating system tasks executed by an operating system included in the computer system;

executing the operating system routing task at a low priority level prior to performing the selected operation; and

raising the operating system routing task to a high priority level in order to perform the selected operation in response to a detection of a trigger condition comprising a link state advertisement protocol message indicating that the selected operation is to be performed, *wherein the raising the operating system routing task to the high priority level causes the operating system routing task to execute without being interrupted by at least one other operating system task running at the low priority.* (emphasis added)

as in the present independent claim 1, from which depends claim 4. Independent claims 6 and 11, from which claims 9 and 14 depend, include analogous features. The deficiencies of Crayford with regard to the above highlighted features of the present independent claims are discussed above with regard to the rejections under 35 U.S.C. 102. The shortcomings of Crayford with regard to the present independent claims are not remedied by combination with the statements regarding the operation of previous systems to update their topology information in lines 26-30 of page 1 of the Applicant's Specification.

For the above reasons, Applicant respectfully urges that the combination of Crayford with lines 26-30 on page 1 of Applicant's Specification does not disclose or suggest all the features of the present independent claims 1, 6 and 11. Since claims 4, 9 and 14 each depend from claims 1, 6 and 11, they are respectfully believed to be patentable over the combination of Crayford with lines 26-30 on page 1 of Applicant's Specification for at least the same reasons.

Reconsideration of all pending claims is respectfully requested.

In view of the above, Applicant respectfully urges that the present claims are allowable, and respectfully request that all rejections of the Final Office Action be withdrawn.

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicant's Attorney at 617-630-1131 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

/David Dagg/

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